DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013847

Address: 333 Burma Road **Date Inspected:** 05-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 7AW+7BW and 7BW+7CW LD split welds. The weld designations reviewed are as follows:

7AW + 7BW

- 1. SEG033C-001,011
- 2. SEG033C-006,043

7AW + 7BW

- 1. SEG035C-043.006
- 2. SEG035B-006,043

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This QA Inspector performed MT of area previously tested and accepted by Quality Control on OBG 7BW+ 7CW LD split welds. MT was performed on LD to FB weld joint (cross beam side) at panel point 52. QA Inspector observed one (1) longitudinal linear indication, measuring approximately between 30mm and 35mm in length respectively. The QA Inspector generated a TL-6028 MT report on this date. Weld MT verified was identified as listed below.

7BW+7CW

1. SEG035C-006.

This QA Inspector issued an incident report on the above noted MT rejection.

7DW+7EW

Flux Core Arc Welding (FCAW) welding was performed on weld joint 01~012 located at SP722-001 cross beam side of segment. Welder is identified as Mr. Fang Xianyou (037748). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-U2-FCM-1.

Flux Core Arc Welding (FCAW) welding was performed on weld joint 043~048 located at SP721-001 cross beam side of segment. Welder is identified as Mr. Ni Leijiang (037723). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-U2-FCM-1.

8BE+8CE

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 004 located at OBE8C bike path side of segment. Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and WR12789 repair procedure.

7BE

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 016 and 017 located at SEG036D cross beam side of segment. Welder is identified as Mr. Chen Renzhi (058087). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2113-FCM.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 022 and 023 located at SEG036E cross beam side of segment. Welder is identified as Mr. Sun Lingling (048047). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2113-FCM.

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 043 and 044 located at SEG036D cross beam side of segment. Welder is identified as Mr. Zhao Guanglin (044779). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2113-FCM.

7BW

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Flaw Core Arc Welding (FCAW) welding was performed on weld joint 043 and 044 located at SEG035B cross beam side of segment. Welder is identified as Mr. Wang Bing (048696). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2113-FCM.

8BE

Flux Core Arc Welding (FCAW) welding was performed on weld joint 024 located at SEG046B cross beam side of segment. Welder is identified as Mr. Li Guimin (220069). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2232-Tc-U4b-F.

8AE+8BE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 002 located at OBE8B bike path side of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and CWR1450 repair procedure.

BK001-034

Flux Core Arc Welding (FCAW) welding was performed on weld joint 005 located at BK-001-034 bike path cantilever member. Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2233-Tc-U4b-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer